

DOCKET FILE COPY ORIGINAL

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C.

**RECEIVED**

AUG 22 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

Advanced Television Systems )  
And Their Impact Upon The )  
Existing Television Broadcast )  
Service )

MM Docket No. 87-268

To: The Commission

**SUPPLEMENT TO PETITION FOR RECONSIDERATION**

Western New York Public Broadcasting Association ("Association"), through its attorneys, hereby files this Supplement to its Petition for Reconsideration filed on June 13, 1997 with respect to the Sixth Report and Order, released April 21, 1997 in the above-captioned proceeding, which adopted the Digital Table of Allotments and related technical rules regarding the digital television broadcast service. In support thereof, the following is shown:

1. The Association is the licensee of public television Station WNED-TV, Buffalo, New York, which operates on Channel 17 and has been allotted DTV facilities at 149 kW on Channel 43 (WNED-DT), and public television Station WNEQ-TV, Buffalo, New York, which operates on Channel \*23 and has been allotted DTV facilities at 50kW on Channel 32 (WNEQ-DT). The Association also has a pending application filed July 25, 1990 for a new public television station on Channel \*46 at Jamestown, New York. The Association's Petition for Reconsideration was based on preliminary interference and coverage analyses without the benefit of FCC Bulletin OET-69 ("OET-69").

2000/08/22 14:44:44  
014

2. Attached hereto are engineering statements prepared by the Association's consulting engineer in order to review the earlier conclusions in light of OET-69. As noted in those statements, OET-69 does little to assist in making the accurate assessment of interference necessary. Fundamental uncertainties remain concerning the proper evaluation of proposed allotments, which must be addressed by the Commission before the Digital Table of Allotments is finalized.

3. Station WNED-TV

A. Comparable And Competitive Facilities: In view of the fact that several other Buffalo television licensees have been proposed for DTV facilities with a power of one megawatt, the Association believes it is essential that it be authorized to maximize the facilities of WNED-DT. While the Commission's plan allows WNED-DT to basically replicate current coverage, it grants other stations in the market substantial coverage increases on top of their already larger service areas, making a currently non-competitive situation even worse. In the increasingly competitive media environment, a public television station requires a coverage area comparable to that of the most powerful stations in the market in order to maximize membership, underwriting and other revenue.

B. Engineering Considerations: The expanded power sought for WNED-DT appears to be impossible to achieve under the Commission's proposed rules on interference. As the attached engineering statement confirms, an increase in power by WNED-DT on its allocated Channel 43 would both cause interference to and receive interference from proposed WIVB-DT on Channel 39 in the Buffalo market. The reasons for this are that WNED-DT and WIVB-DT have transmitters located at 29.6323

miles from each other, and more importantly, located at almost polar opposite extremes of the principal population center of the market (approximately 180 degrees difference on a compass), and WIVB-DT has a proposed 7-1 power advantage over WNED-DT, almost guaranteeing that WNED-DT will be overwhelmed by the WIVB-DT signal in portions of its coverage area. Co-location of the Association's transmission facilities with WIVB-DT is impractical. As a public broadcaster, the Association lacks the funding to build new transmission facilities in a location distant from its present site which was developed in the mid-1980s at a cost of some \$2,000,000.

4. Station WNEQ-TV. The Association has likewise sought to maximize its DTV facilities for Station WNEQ-DT. Much of the rationale given for WNED-DT applies to WNEQ-DT, except that the problems of interference and power disparity are even more severe. WGRZ-DT is proposed to be located on Channel 33 immediately adjacent to WNEQ-DT, Channel 32. Its transmitter, like WIVB-DT's, is located in an almost 180 degree different direction from WNEQ-DT at a distance of 28.1121 miles. Were WNEQ-DT to operate at 50kW, as proposed, and WGRZ-DT to operate at 1000 kW (a 20-1 power differential on an adjacent channel with transmitters not co-located) WNEQ-DT's signal could be substantially interfered with in so much of its coverage area as to render its operation nearly valueless, thus denying much of the Buffalo market the benefits of this unique public television service. Further, even if WNEQ-DT were allowed to raise its power to 1000 kW on its allocated Channel 32, it would provide interference to and receive interference from WGRZ-DT on immediately adjacent Channel 33. Given the transmitter locations of WNEQ-DT and WGRZ-DT, a new channel assignment for one or both stations to receive non-adjacent channels is

imperative, and as with the WNED-DT/WIVB-DT situation, if the channel location is close, equal power must be authorized. Our concern regarding adequate adjacent channel DTV-to-DTV interference protection was specifically supported in a pleading to the Commission filed by AMST and the Broadcasters Caucus when they cited our situation as one with major interference. As with its sister station, WNED-TV, co-location of WNEQ's DTV facilities with WGRZ-DT is impractical for financial and other reasons. And WNEQ-TV has the same need, for competitive reasons, for technical facilities comparable to that of the most powerful in the market in order to maximize membership, underwriting and other revenue.

5. Short Spacing. A study by the Association's engineering department has revealed that its current DTV allocations are both short spaced to Canadian NTSC channels which could require the use of directional antennas and subsequent loss of Canadian viewers and all important membership revenue. Again, OET-69 fails to address this issue. The Canadian NTSC channels to which the Association's WNED-DT, Channel 43 is short spaced are:

CITY-TV, Channel 57, Toronto, Ont.

CFMT-TV, Channel 47, Toronto, Ont.

CIII-TV, Channel 41, Toronto, Ont.

The Association's WNEQ-DT, Channel 32, is short spaced to:

CFMT-TV, Channel 47, Toronto, Ont.

CBLF-TV, Channel 25, Toronto, Ont.

6. Canadian Border Considerations. The Association is unable to effectively analyze the potential for either power upgrades or channel changes since the standards

for protecting Canadian facilities are unknown, and no DTV allotment table has yet been proposed for Canada. As noted in the attached statement, "OET-69 provides no new insight into dealing with the border issues." The Association again urges that all U.S. border stations should be assigned maximum facilities to protect them in future negotiations with Canada which has historically been extraordinarily vigilant in protecting the interests of its domestic broadcasters. The present Canadian-U.S. treaty permits a maximum of one megawatt power for U.S. licensees without negotiations with Canada. Further, the Commission is already proposing that Canada will have to deal with a 1000 kW situation on the border, by assigning two such maximum power allocations to the Buffalo market (WGRZ-DT and WIVB-DT). The Association requests a power of 1000 kW be provided for its stations now before Canada acts on its own allocation table.

7. Inability To Resolve Problems Locally. The Association, having expended thousands of dollars on engineering studies, has been totally frustrated by its inability to locate alternative channels which would allow its stations to operate at maximum power. The Association believes it is not realistic for the Commission to expect these highly complex engineering matters to be resolved at the local and regional level. Were the impact of power and channel changes to have only a local effect, solutions might be found within a local market area. However, such changes in a single market could cause dislocation in a number of markets region-wide and a licensee cannot realistically be expected to work out interference and other problems with stations located at great distances. The Association submits that only the Commission has the facilities to rework the allocation table to find alternatives to the problematic channel assignments

and power levels identified for its stations. And the Association urges the Commission to solve many of the problems associated with the channels in its current DTV plan by providing additional core channels in its allocation plan.

8. For all of the reasons set forth in its Petition for Reconsideration and in this Supplement, the Association reiterates that the Commission should:

- (A) make alternative assignments for both of the Association's DTV channels;
- (B) assign power at one megawatt to both of its DTV channels;
- (C) protect the Association's allotments (as well as its Canadian viewers and donors) from encroachment or limitation by Canadian DTV allotments;
- (D) confirm the protection of the Association's pending application on reserved Channel \*46, Jamestown, New York, with an in-core DTV allotment; and
- (E) consider providing additional core channels in its allocations table to facilitate resolution of the above issues.

Respectfully submitted,

WESTERN NEW YORK PUBLIC BROADCASTING  
ASSOCIATION

By: Robert A. Woods  
Robert A. Woods

SCHWARTZ, WOODS & MILLER  
1350 Connecticut Avenue, N.W.  
Suite 300  
Washington, D.C. 20036

202/833-1700  
Its Attorneys

August 22, 1997



**Supplement to**  
**Petition for Reconsideration**

**Western New York Public Broadcasting Association**  
**WNED-TV**  
**Buffalo, NY**

Western New York Public Broadcasting Association, licensee of WNED-TV, Buffalo, NY (WNED), submitted a Petition for Reconsideration in Docket 87-268 regarding the allotment made by the FCC for DTV operation in its Sixth Report & Order. The engineering support for that petition was based on preliminary interference and coverage analyses conducted without the benefit of FCC Bulletin OET-69. Since that filing, OET-69 has been released by the Commission and this engineering statement has been prepared in order to review the earlier conclusions in light of OET-69.

**Co-Channel Issues**

WNED-TV operates on Channel 17 and has been allotted facilities of 149 kW on Channel 43 for its DTV operations (WNED-DT). WNED is desirous of maximizing its DTV facilities in order to better serve the Buffalo region. A study<sup>1/</sup> was conducted to determine whether WNED could operate with a 1000 kW ERP; two other Buffalo stations have been allotted DTV facilities of 1000 kW.

---

<sup>1/</sup> The study was conducted using the NTIA/ITS Telecommunications Analysis Service (TAS) software as it is the only recognized methodology that emulates the FCC software. However, it is recognized that certain assumptions made in the TAS version differ from those used by the Commission which tend to predict greater levels of interference than does the Commission's version.



The study demonstrated that interference to two NTSC stations (WNYS, Channel 44, Batavia, NY, and WUAB, Channel 43, Lorain, OH) would increase significantly (from 52 sq. km and 19 sq. km to 725 sq. km and 617 sq. km, respectively). In addition, new interference would be created to an allotted co-channel DTV facility at Pittsburgh, PA. Unless the Commission permits some amount of "new" interference to be created, it will be impractical to "maximize" this facility or even minimally increase its power in the directions of the WNED audience.

#### **Adjacent-Channel Issues**

The Commission has allotted Channel 39 at Buffalo with an ERP of 1000 kW. The sites of the WNED-DT Channel 43 and the WIVB-DT Channel 39 allotments are separated by 48 km. While the Commission ignored the possibility of DTV stations separated 4 channels having any mutual interference relationship, it is clear from the ACATS studies and recommendations that this is not the case. If such facilities are colocated, or nearly so, the likelihood for mutual interference is minimal; however, with facilities serving the same market separated by 48 km, there will be interference caused to the reception of each DTV station in the vicinity of the other transmitter. WNED-DT will likely suffer more interference due to the disparity in the ERP's of the two facilities (1000 kW vs. 149 kW) unless WNED-DT is permitted to "maximize" its facility to a similar power level.





### **Canadian Border Considerations**

The Canada-U.S. border is located in very close proximity to Buffalo. OET-69 provides no new insight into dealing with the border issues. WNED has no available means to analyze the potential for either power upgrades or a possible channel allotment change as the standards for protecting existing Canadian facilities are unknown; the absence of a DTV allotment table for the Canadian facilities further compounds the uncertainties.

A number of issues are apparent. For example, will power upgrades (maximizations) which comply with domestic requirements be somehow limited by transborder agreements? Will directional antennas be required and will they be practical to construct? When will border stations be made aware of the limitations so that alternate channel assignments can be considered? These and other related issues must be resolved before stations such as WNED-TV can be precluded from making alternate allotment proposals.

### **Conclusion**

WNED is unable to properly evaluate its allotment because OET-69 does little to assist in making the necessary accurate assessment of interference. This is further compounded by the uncertainty of the border situation.

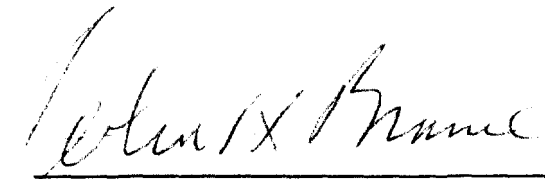
The Commission should address these issues immediately and permit licensees the opportunity to properly evaluate their allotments before the table is finalized.

**B**

4

**Certification**

This statement was prepared by me or under my direction. All assertions contained in the statement are true of my own personal knowledge except where otherwise indicated and these latter assertions are believed to be true.

  
\_\_\_\_\_  
John F.X. Browne, P.E.  
August 18, 1997



**Supplement to**  
**Petition for Reconsideration**

**Western New York Public Broadcasting Association**  
**WNEQ-TV**  
**Buffalo, NY**

Western New York Public Broadcasting Association (WNYPB), licensee of WNEQ-TV, Buffalo, NY, submitted a Petition for Reconsideration in Docket 87-268 regarding the allotment made by the FCC for DTV operation in its Sixth Report & Order. The engineering support for that petition was based on preliminary interference and coverage analyses conducted without the benefit of FCC Bulletin OET-69. Since that filing, OET-69 has been released by the Commission and this engineering statement has been prepared in order to review the earlier conclusions in light of OET-69.

**Co-Channel Issues**

WNEQ-TV operates on Channel 23 and has been allotted facilities of 50 kW on Channel 32 for its DTV operations (WNEQ-DT). WNYPB is desirous of maximizing its DTV facilities in order to better serve the Buffalo region. A study<sup>1/</sup> was conducted to determine whether WNEQ could operate with a 1000 kW ERP; two other Buffalo stations have been allotted DTV facilities of 1000 kW.

---

<sup>1/</sup> The study was conducted using the NTIA/ITS Telecommunications Analysis Service (TAS) software as it is the only recognized methodology that emulates the FCC software. However, it is recognized that certain assumptions made in the TAS version differ from those used by the Commission which tend to predict greater levels of interference than does the Commission's version.



The study demonstrated that while the DTV power could be increased slightly in several directions, WNEQ-DT could not increase its power significantly without creating some “new” interference. Unless the Commission permits some amount of “new” interference to be created, it will be impractical to “maximize” this facility or even make other than a minimal increase in power in the directions of the WNEQ audience.

### **Adjacent-Channel Issues**

The Commission has allotted Channel 33 at Buffalo with an ERP of 1000 kW. The sites of the WNEQ-DT, Channel 32, and the WGRZ-DT, Channel 33, allotments are separated by 45 km. This violates the Commission’s standards for new allotments (which precludes adjacent-channel allotments separated by 40 to 96 km). If such facilities are colocated, or nearly so, the likelihood for mutual interference is minimal; however, with adjacent-channel facilities serving the same market separated by 45 km, there will be interference caused to the reception of each DTV station in the vicinity of the other transmitter. WNEQ-DT will likely suffer more interference due to the disparity in the ERP’s of the two facilities (1000 kW vs. 50 kW) unless WNEQ-DT is permitted to “maximize” its facility to a similar power level.

### **Canadian Border Considerations**

The Canada-U.S. border is located in very close proximity to Buffalo. OET-69 provides no new insight into dealing with the border issues. WNYPB has no available means to analyze the potential for either power upgrades or a possible channel allotment change as the standards for protecting existing Canadian facilities are unknown; the absence of a DTV allotment table for the Canadian facilities further compounds the uncertainties.

A number of issues are apparent. For example, will power upgrades (maximizations) which comply with domestic requirements be somehow limited by transborder agreements? Will directional antennas be required and will they be practical to construct? When will border stations be made aware of the limitations so that alternate channel assignments can be considered? These and other related issues must be resolved before stations such as WNYPB can be precluded from making alternate allotment proposals.

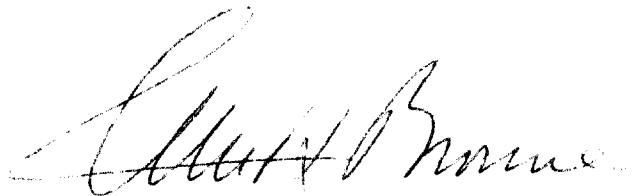
### **Conclusion**

WNYPB is unable to properly evaluate its allotment because OET-69 does little to assist in making the accurate assessment of interference necessary. This is further compounded by the uncertainty of the border situation.

The Commission should address these issues in order to permit licensees the opportunity to properly evaluate their allotments before the table is finalized.

### **Certification**

This statement was prepared by me or under my direction. All assertions contained in the statement are true of my own personal knowledge except where otherwise indicated and these latter assertions are believed to be true.



John F.X. Browne, P.E.  
August 18, 1997